

## ENT COOPERATION TRE

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

WRITTEN OPINION  
(PCT Rule 66)

To:  Viering, Jentschura & Partner Patent- und Rechtsanwälte Steinsdorfstr. 6 80538 München ALLEMAGNE	VIERING, JENTSCHURA & PARTNER Erhalten / Received  10. Feb. 2004  Frist / Due Date: 9. S WR: 24.2	Date of mailing: 09.02.2004 (day/month/year)  REPLY DUE  within 3 month(s) from the above date of mailing	
Applicant's or agent's file reference  P 26038	International application No.  PCT/IB 03/01243	International filing date (day/month/year)  03.03.2003	Priority date (day/month/year)  15.04.2002
International Patent Classification (IPC) or both national classification and IPC  B62K15/00			
Applicant  STUDIO MODERNA SA et al.			

1. This written opinion is the first drawn up by this International Preliminary Examining Authority.
2. This opinion contains indications relating to the following items:
  - I  Basis of the opinion
  - II  Priority
  - III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV  Lack of unity of invention
  - V  Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI  Certain documents cited
  - VII  Certain defects in the international application
  - VIII  Certain observations on the international application
3. The applicant is hereby invited to reply to this opinion.
 

**When?** See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).

**How?** By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

**Also:** For an additional opportunity to submit amendments, see Rule 66.4. For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis. For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 15.08.2004

Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  Avisse, M  Formalities officer (incl. extension of time limits) Zibell, M Telephone No. +49 89 2399-7213	
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**I. Basis of the opinion**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed"*):

**Description, Pages**

2-9 received on 24.09.2003 with letter of 18.09.2003

**Claims, Numbers**

1-17 received on 24.09.2003 with letter of 18.09.2003

**Drawings, Sheets**

1/4-4/4 received on 30.05.2003 with letter of 12.05.2003

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages: 1
- the claims, Nos.:
- the drawings, sheets:

5.  This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

see separate sheet

6. Additional observations, if necessary:

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**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)                      Claims        1

Inventive step (IS)              Claims

Industrial applicability (IA)      Claims

**2. Citations and explanations**

**see separate sheet**

**Re Item I**

1. The amendments filed with the International Bureau under Rule 26 PCT and with letter of 18.09.2003 introduce subject-matter which extends beyond the content of the application as filed, contrary to Article 34 (2) (b) PCT; further reference is made to the International Preliminary Examination Guidelines, part IV, chapter VI, paragraphs 7.9 and 7.13. The reasons are the following:
  - 1.1 The drawings have been so massively amended that they introduce new subject-matter which was not disclosed in the application and are therefore not allowable. The amendments concerned are for example:
    - in figure 1: the change of reference sign "29" into "28", the alteration of element "30";
    - in figure 2: the new folded position and arrangement of the front wheel assembly "4" which does correspond neither to the position defined in originally filed figure 2 nor to the position defined in originally filed claim 1;
    - in figure 3: the altered position of reference sign "40" and of element "30";
    - in figure 4: the added rod "28";
    - in figure 6: the completely different front wheel assembly;
    - figures 1-6: the addition of elements or accessories (e.g., cables, quick-release mechanism, form of the tubes or brackets, connections between the saddle and the saddle tube,...) which were not present or not really well defined in the original documents.
  - 1.2 The wording of the amended independent claims 1 and 4 differs considerably from the wording of independent claim 1 as originally filed. It seems that with the amendments filed with letter of 18.09.2003, the applicant has deleted the following features:
    - "the fork blades are bent forward; on the fork blades, there are two backwards-pointing pivotable swing-arms, which hold the front wheel, (...); the swing-arms are connected by a stirrup which encloses the wheel, (...)";
    - "the rear wheel (...) can be folded around a pivot (...) equipped with a bearing assembly with a shaft holding two coaxial sprockets (...)".

Since these features are presented as essential in the disclosure of the invention in the light of the technical problem which it seeks to solve, their deletion introduces subject-matter which extends beyond the content of the application as filed, contrary

- to Article 34(2)(b) PCT.
2. An indication in the applicant's letter as to where the amendments have been disclosed in the original application documents, has not been given. The statement " (...) the new claim sheets (...), and is supported throughout the application as filed" in the letter of the applicant does not allow the skilled person to find any basis in the original application documents for the massively rewritten documents.
  3. **As a consequence, the following analysis will be based on the application documents as originally filed.**

**Re Item V**

4. Claim 1 does not meet the requirements of Article 6 PCT in that the matter for which protection is sought is not clearly defined. The reasons are the following:
  - 4.1 The attention of the applicant is drawn to the fact that for clarity reasons the claims should be worded in one sentence, e.g. by using semicolons binding relative sentences instead of full stops.
  - 4.2 According to Rule 6.2(b) PCT in combination with the PCT Guidelines, Section IV, Chapter III-4.11, the reference signs are not to be construed as limiting the scope of a claim but merely as aids to an easier understanding of the defined subject-matter. As a consequence, the subject-matter of the claims should be clear without reading the reference signs. This is not the case for the following features: "the sprocket (23)", "the sprocket (24)", "the sprocket (32)".
5. Nevertheless, with the interpretation given under the following paragraphs 5.1 and 5.2, present claim 1 appears to meet the criteria of novelty, inventive step and industrial applicability defined in Article 33 PCT. The reasons are the following:
  - 5.1 The document DE-A-43 12 832 (=D1) is regarded as the closest prior art to the subject-matter of claim 1 and discloses (see D1: abstract; column 2, line 56 - column 3, line 9; figures 1-3 ) a folding bicycle comprising:

A frame (1) of known geometry of the front wheel angle, the wheelbase and the distance between the cranks, the seat and the handlebar;

A fork (4) which is attached to the frame (1) at a bearing;

A front wheel (11), a rear wheel (10), handlebars, a transmission, a brake assembly, a seat, and other accessories (not shown);

Wherein on the fork blades (4), there are two pivotable swing-arms (see on figure 1, the arms connecting the elements "4" and "5"), which hold the front wheel (11) in such a way that its position remains the same as in a usual bicycle and can be adjusted to riding preferences;

said swing-arms being connected by a stirrup (5), which encloses said front wheel (11), the top of said stirrup being pressed against a joint of the front fork under said bearing (see figure 1);

said front wheel (11) being pivotable forwards by approximately 180 degrees; and said rear wheel (10) being mounted to the chain stays (9), which can be folded around a pivot (3) placed on the frame (1) near a chainring.

5.2 The subject-matter of claim 1 therefore differs from this known bicycle in that:

- said fork blades (4) of the fork are bent backwards; and said two pivotable swing-arms point forward;
- said fork can be turned by 180 degrees as well; by doing so, said front wheel (11) is partially placed into the gap between the double down tubes (2) of the frame (1);
- said pivot (19) is equipped with a bearing assembly (21) with a shaft (22), holding two coaxial sprockets (23,24);
- one of said coaxial sprockets (23, 24) is connected to said chainring (15) and said cranks (16) through a front chain (25), the other coaxial sprocket (24) being connected to a rear sprocket (32) mounted on said rear wheel (18) through a rear chain (31).

The subject-matter of claim 1 is therefore novel (Article 33(2) PCT).

5.3 The problem to be solved by the present invention may therefore be regarded as to provide an alternative construction to known foldable bicycles.

The constructive solution disclosed in claim 1 of the present application is not disclosed in its present form in any of the documents cited in the search report. Nor is there a hint in D1 or in the other documents cited in the search report to modify the bicycle known from D1 to arrive to the bicycle of the present invention.

Thus, the subject-matter of claim 1 involves an inventive step (Article 33(3) PCT).

6. If the applicant files amended claims, following should be taken into account:

- Rule 6.3(b)i) and ii) PCT: correct two part form of independent claims with regard to the available prior art (see paragraph 2.1);
- Rule 6.4 PCT: the relevant subject-matter should be defined in terms of a single independent claim followed by dependent claims covering features which are merely optional;
- Rule 5.1(a)(ii) PCT: the relevant background art disclosed in the document D1 should be mentioned in the description and this document identified therein;
- Rule 5.1(a)iii) PCT: description in conformity with the new claims;
- Article 34 (2) b) PCT: the applicants are requested to identify in their reply those passages of the application as originally filed which form a basis for the amendments.

For the sake of efficiency, it is requested that an additional copy containing **handwritten** amendments be forwarded together with any clear copy replacement pages.